

**AMENDMENTS TO THE DRAWINGS**

The attached sheets of drawings include changes to the figures in order to overcome the objection raised in the Office Action. These sheets, which include Figures 1-10, replace the original sheets including the same figures.

Attachment: Replacement Sheets

**REMARKS**

The present Amendment is in response to the Examiner's Office Action mailed September 26, 2005. Claims 1-22 were pending. Claims 1, 3, 19, and 22 are amended. Claims 1-22 remain pending in view of the above amendments.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants' understanding and discussion of the references, if any, is consistent with the Examiner's understanding.

**I. Objections to the Drawings**

The Office Action objects to the drawings, noting that they appear to be low-quality photocopies, and that some details of the drawings are obscured due to poor resolution. In response, Applicants submit herewith corrected drawings sheets that resolve the above-described problems purported in the Office Action. These amended drawing sheets are included and attached hereto in an appendix attached hereto following page 14 of this Response. Applicants submit that no new matter has been added to the drawings as a result of their amendment. Entry

of the amended drawings and removal of the objections to the drawings are therefore respectfully solicited.

## II. Rejections Under 35 U.S.C. §102

The Office Action rejects claims 1-2, 10-11, 13-14, and 22 under 35 U.S.C. § 102(a)<sup>1</sup> as being anticipated by U.S. Patent No. 6,418,246 to Gampp (“*Gampp*”). However, *Gampp* -- assuming *arguendo* that it and the other references cited herein qualify as prior art -- fails to teach each and every element of the pending claims and thus is not an anticipatory reference.

In particular, the claimed invention is substantially distinct from the device taught by *Gampp*. In particular, amended independent claim 1 requires, in a planar optical circuit, the presence of an optical component associated with a generally planar substrate, a waveguide structure configured to transfer an optical signal associated with the optical component, and a scattered light system operable to influence propagation of scattered light from the optical component in a targeted manner, “the scattered light system integrated into the generally planar substrate *as to be at least partially co-planar with the waveguide structure.*” *Gampp* discloses no such optical circuit. Indeed, the trenches 84, 86, exemplarily shown in Figures 4 and 5 of *Gampp* to intercept scattered light, are positioned *below*, not co-planar with, the waveguide structure (waveguides 12-14) of *Gampp*. This trench configuration of *Gampp* is reflected in its disclosure where, for example, column 5, lines 47-56 state that each trench 84, 86 is positioned in the substrate 78 and is “displaced toward the center of the substrate 78 from the opening [of the trench] at the *bottom surface* 72 of the substrate” (emphasis added). In contrast, the waveguides 12-14 of *Gampp* are formed on an *upper surface* of the substrate. *See* col. 4, ll. 3-4,

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<sup>1</sup> Because *Gampp* is only citable under 35 U.S.C. § 102(a) Applicants do not admit that *Gampp* is in fact prior art to the claimed invention but reserve the right to swear behind *Gampp* if necessary to remove it as a reference.

26-27; col. 5, ll. 35-38. This non-planar positioning of *Gampp*'s trenches with respect to its waveguides structures is not surprising, given the fact that the disclosure of *Gampp* is concerned with intercepting scattered light that is reflected near the bottom and sides of the substrate, hence the corresponding positioning of its trenches from the bottom of the substrate and extending laterally to each side thereof.

In contrast, independent claim 1 requires that its scattered light system be at least partially co-planar with its waveguide structure. As *Gampp* fails to disclose this relationship, *Gampp* fails to teach or suggest each and every element of independent claim 1, and thus cannot be used to anticipate the present invention. Further, inasmuch as claims 2 and 10-18 are variously dependent on independent claim 1, they are also allowable for at least the reasons given above. Applicants therefore respectfully submit that each of the above claims is patentably distinct and request that the Section 102 rejection in view of *Gampp* be withdrawn.

Independent claim 22 is also patentably distinct from *Gampp*. In particular, claim 22 discloses, in a planar optical circuit having an optical component associated with a planar substrate and a waveguide structure associated with the optical component, a means for influencing a propagation of scattered light in the planar optical circuit in a targeted manner, “the influencing means integrated into the generally planar substrate *such that the influencing means is co-planar with at least a portion of the waveguide structure.*” As was discussed above, *Gampp* fails to teach at least this limitation. Thus, independent claim 22 is also allowable, and the Section 102 rejection in view of *Gampp* should be withdrawn. Applicants therefore respectfully solicit the removal of the rejection under Section 102 to the above claims as discussed above.

**III. Allowable Subject Matter**

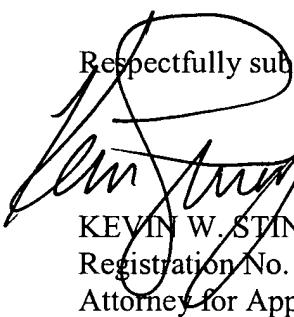
The Office Action objects to claim 3-9, 12, 15-21 for being dependent upon a rejected base claim, but states that these claims would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. In response, Applicants have rewritten claims 3 and 19 in independent form to include all of the pertinent limitations of the base claim and any intervening claims. As such, now-independent claims 3 and 19, together with dependent claims 4-9 and 20-21, respectively, are in condition for allowance. Removal of the objection to these claims is therefore respectfully requested. Applicants note that claims 12 and 15-18 remain unchanged, but are allowable for their dependence on independent claim 1, which Applicants submit is allowable for at least the reasons given above.

### **CONCLUSION**

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this 27<sup>th</sup> day of February, 2006.

Respectfully submitted,

  
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